

IN SEARCH OF...

Job Hazard Analysis - A simple, but powerful tool to eliminate or control hazards.

What is a job hazard analysis (JHA)? It's a procedure that helps to integrate acceptable safety and health principles and practices into a particular operation. It is based on the idea that safety is an integral part of every job-- not a separate entity. JHA's are sometimes called "task hazard analyses".

How do JHA's improve safety and reduce injuries and illnesses? By doing an analysis of particular jobs, previously undetected hazards might be identified. The systematic, four-step, analysis process leads to increased job knowledge, hazard awareness, communication between workers and supervisors, and acceptance of safe work practices.

What are the steps? (1) Select the job to be analyzed. (2) Break the job down into a sequence of steps. (3) Identify hazards. (4) Determine preventive measures to overcome the hazards. Find below a sample of a worksheet that can be used when doing a job hazard analysis.

How do I select the job? Ideally, all jobs should be subjected to a JHA. However, due to practical constraints, the most critical jobs should be examined first. Factors to consider: (1) Accident frequency and severity. (2) Potential for severe injuries and illnesses. (3) New jobs-- hazards may not be evident or anticipated. (4) Modified jobs-- new hazards associated with changes. (5) Infrequently performed jobs--non-routine jobs often put workers at greater risk.

How do I break the job into "basic steps"? This part of the JHA is best prepared by watching a worker doing the job. A rule of thumb is that most jobs can be described in less than ten steps. If more steps are required, you might combine steps if appropriate, or divide the job into two segments, with separate JHA's. Steps are recorded in sequence, and begin with an action verb, i.e., "Park vehicle" and "Remove spare and tool kit".

How do I identify hazards? Each basic step may have associated hazards. These can be determined by observation, knowledge of accident and injury causes, personal experience, etc. The best way to identify hazards is to observe a worker who is experienced and capable in all aspects of the job. Often, multiple observations may be needed. Use questions to help identify hazards, i.e.; can parts of the body get caught in or between...; can the worker slip, trip, or fall; is there a danger from falling objects, etc.? The hazards are listed in the middle column of the worksheet, numbered to match the corresponding step.

How do I determine preventive measures? In order of preference, consider (1) **Eliminating** the hazard through engineering, i.e., increasing ventilation, or substitution, i.e., less hazardous substance or changing equipment or tools. (2) **Containing** the hazard with enclosures, guards, booths, etc. (3) **Administrative** measures, such as revising work procedures, i.e., changing the sequence of steps or adding steps, such as lockout/tagout. (4) **Personal Protective Equipment** may be the least effective control measure, and should be used only if no other solutions are possible.

How do I communicate the JHA information to everyone affected?

Using a narrative format, communicate the preventative measures or new procedures which are associated with each step in the job. There are two excellent resources for performing JHA's and ensuring that the effort in preparing them are translated into safer

work practices. One of the best resources is available on the website of the Canadian Centre for Occupational Health and Safety (CCOHS) at <http://www.ccohs.ca>. Go into OSH Answers and find job hazard analysis under Health & Safety Programs. If you don't have a computer which is linked to the Internet, go to the public library and use theirs. This document is that useful and important! The other resource is OSHA's job hazard analysis booklet (OSHA 3071) which is downloadable from the OSHA website at www.osha.gov.